(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 17 February 2005 (17.02.2005)

PCT

(10) International Publication Number WO 2005/013975 A1

(51) International Patent Classification7: A61K 31/404, C07D 209/42, A61P 3/12

(21) International Application Number:

PCT/GB2004/003364

(22) International Filing Date: 4 August 2004 (04.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0318464.5

7 August 2003 (07.08.2003) GI

- (71) Applicant (for all designated States except MG, US): AS-TRAZENECA AB [SE/SE]; Sodertalje, S-151 85 (SE).
- (71) Applicant (for MG only): ASTRAZENECA UK LIM-ITED [GB/GB]; 15 Stanhope Gate, London, Greater London W1K 1LN (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BIRCH, Alan, Martin [GB/GB]; AstraZeneca R & D Alderley, Alderley Park, Macclesfield, Cheshire SK10 4TG (GB). BENNETT, Stuart, Norman, Lile [GB/GB]; AstraZeneca R & D Alderley, Alderley Park, Macclesfield, Cheshire SK10 4TG (GB). GODFREY, Linda [GB/GB]; AstraZeneca R & D Alderley, Alderley Park, Macclesfield, Cheshire SK10 4TG (GB). SIMPSON, Iain [GB/GB]; AstraZeneca R & D Alderley, Alderley Park, Macclesfield, Cheshire

SK10 4TG (GB). WHITTAMORE, Paul, Robert, Owen [GB/GB]; AstraZeneca R & D Alderley, Alderley Park, Macclesfield, Cheshire SK10 4TG (GB).

- (74) Agent: ASTRAZENECA; Global Intellectual Property, S-151 85 Sodertalje (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DB, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INDOLAMIDE DERIVATIVES WHICH POSSESS GLYCOGEN PHOSPHORYLASE INHIBITORY ACTIVITY

$$(R^4)_m$$

$$(R^4)_m$$

$$(R^5)_n$$

$$(R^5)_n$$

$$(R^5)_n$$

$$(R^5)_n$$

$$(R^5)_n$$

$$(R^5)_n$$

(57) Abstract: A compound of the formula (1) or a pharmaceutically-acceptable salt wherein, for example, A is phenylene or heteroarylene; Y is selected from -C(O)R², -C(O)OR², -C(O)NR²R³, -(1-4C)alkyl [optionally substituted] -(2-4C)alkenyl, -SO₂NR²R³, and -S(O)_CR² (wherein c is 0, 1 or 2); compounds which possess glycogen phosphorylase inhibitory activity and accordingly have value in the treatment of disease states associated with increased glycogen phosphorylase activity. Processes for the manufacture of compounds and pharmaceutical compositions containing them are described.